

1: Introduction



Welcome to Test Driven Cookbook Development.

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Introduce Yourself

Name

Current job role

Previous job roles / Background

Experience with Chef

Favorite Text Editor

Before we start let me introduce myself. Then I would like it if everyone had a chance to introduce themselves.

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Expectations

You will leave this class with the confidence to create and extend a cookbook using ChefSpec and ServerSpec in a test-driven development workflow.

You bring with you your own domain expertise and problems. Chef is a framework for solving those problems. Our job is to teach you how to express solutions to your problems with Chef.

The goal of this class is to give you an introduction to these core testing tools that focuses on the workflow and thought process on why and how to best employ them. Testing is a huge domain and will have to keep a tight focus on the challenges and exercises presented in this content. During and throughout the content we will have discussion where we may have additional time to talk about many different topics but in this interest of time and popular opinion we may need to leave those discussions.

During the introductions you learned about the other individuals here in the course with you. They may have shared similar problems and domains. During the time that we are here respectfully reach out to them so that you can continue the conversation, grow each others' knowledge, and become better professionals.

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Expectations

Ask Me Anything: It is important that we answer your questions and set you on the path to be able to find more answers.

Break It: If everything works the first time go back and make some changes. Explore! Discovering the boundaries will help you when you continue on your journey.

All throughout this training I strongly encourage you to ask questions whenever you do not understand a topic, an acronym, concept, or software. By asking a question you better your learning and often times better the learning of those with you in this training. Asking questions is a sign of curiosity that we want to encourage and foster while we are here together.

This curiosity can also be employed by exploring the boundaries of the tools you are using and the language you are writing. The exercises and the labs we will perform will often lead you through examples that work from the beginning to the end. When you develop solutions it is rare that something works from the start all the way to the end. Errors and issues come up from typos or the incorrect usage of a command of the programming language. When you fall off the path it can often be hard to find your way back. Here, if you find yourself always on the correct path explore what happens when you step off of it, what you see, the error messages you are presented with, the new results you might find.

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Testing

Testing is a large domain of tools, languages, and practices.

Learning Testing is like learning a language. You will reach fluency fast but it will take practice until you become comfortable.

The best way to improve your testing skill is to write tests.

Testing is a large topic and we will spend the training focused on the core workflow of test-driven development, the tools, and the language constructs. During this time you will be performing a lot of hands on work by executing the commands and write the source code necessary to complete the objectives. While this means we will not move through a larger body of content it will mean that you have a better understanding of the material and have built the important muscle memory to perform this work after this training is done.

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Group Exercises, Labs, and Discussion


This course is designed to be hands on. You will run lots of commands, write lots of code, and express your understanding.

- **Group Exercises:** All participants and the instructor will work through the content together. The instructor will often lead the way and explain things as we proceed.
- **Lab:** You will be asked to perform the task on your own or in groups.
- **Discussion:** As a group we will talk about the concepts introduced and the work that we have completed.

The content of this training has been designed in a way to emphasize this hands-on approach to the content. Together, we will perform exercises together that accomplish an understood objective. After that is done you will often emphasize an activity by performing a lab. The lab is designed to challenge your understanding and retention of the previously accomplished exercises. You can work through this labs on your own or in groups. After completing the labs we will all come together again to review the exercise. Finally, we will end each section with a discussion about the topics that we introduced. These discussions will often ask you to share your opinions, recent experiences, or previous experiences within this domain.

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Morning	Afternoon
Introduction	Faster Feedback with Unit Testing
Why Write Tests? Why is that Hard?	Testing Resources in Recipes
Writing a Test First	Refactoring to Attributes
Refactoring Cookbooks with Tests	Refactoring to Multiple Platforms
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This is the outline of the events for this training. Please take a moment to review this list to ensure that the topics listed here meet your expectations. Take a moment to note which topics are of most interest to you. Also note which topics are not present here on this list. We will discuss your thoughts at the end of the section.

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EXERCISE




Pre-built Workstation

We will provide for you a workstation with all the tools installed.

Objective:

- ☐ Login to the Remote Workstation

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As I mentioned there is a lot work planned for the day. To ensure we focus on the concepts we introduce and not on troubleshooting systems we are providing you a workstation with the necessary tools installed to get started right away.

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Login to the Workstation



```
> ssh IPADDRESS -l USERNAME
```


```
The authenticity of host '54.209.164.144 (54.209.164.144)' can't
be established.RSA key fingerprint is
SHA256:tKoTsPbn6ER9BLThZqntXTxIYem3zV/iTQWvhLrBIBQ.Are you sure
you want to continue connecting (yes/no)? yes
chef@54.209.164.144's password: PASSWORD
chef@ip-172-31-15-97 ~]$
```

I will provide you with the address, username and password of the workstation. With that information you will need to use the SSH tool that you have installed to connect that workstation.

This demonstrates how you might connect to the remote machine using your terminal or command-prompt if you have access to the application ssh. This may be different based on your operating system.

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EXERCISE




Pre-built Workstation

We will provide for you a workstation with all the tools installed.

Objective:


- ✓ Login to the Remote Workstation

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Now that you are connected to that workstation we have taken care of all the necessary work to get started with the training.

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DISCUSSION




Discussion

What topics are you most interested in learning?

What topics are missing that you want to learn about?

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Let us end with a discussion about the following topics.

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DISCUSSION



Q&A

What questions can we answer for you?

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Before we continue let us stop for a moment answer any questions that anyone might have at this time.

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